

**BC Timber Sales
ENVIRONMENTAL MANAGEMENT SYSTEM**

**TABLE 004-3 ENVIRONMENTAL ASPECT EVALUATION FORM
(Aspects List and Evaluation Matrix)**

Business Area:		Kootenay					
Date Approved:							
TSM Approval Signature:							

Definitions:
Environmental Aspect: Element of the organization's activities that interacts with the environment
Potential Environmental Impacts: Refer to all potential resources that could be impacted as a result of an aspect. In order for an impact to be applicable to a particular aspect, one or more of the following must be demonstrated: direct cause and effect relationship, material adverse effect, environmental concern of interested parties, or excess of legal thresholds
Generally Applicable Example: An example of a significant impact that gives context to the discussion for the risk ranking process. This example represents the greatest risk (Typically in consequence) of the impacts listed for a particular aspect
Impacts rationalization: Description of the scale severity and/or duration of impact that may occur to a resource category as a result of an aspect
Probability: The likelihood that an event of a particular magnitude will occur during normal operations (Note: Choose probability values from drop-down box at bottom of cell)
Consequence: The qualitative magnitude of impact that an event would have on the environment if it were to occur. (Note: Choose consequence values from drop-down box at bottom of cell)
Inherent Risk: The risk value determined by measuring the probability and magnitude values of a event against the Risk Matrix table (Note: Value calculated automatically)
Significant Aspect: An aspect with an *Inherent Risk* rating of **Moderate** or higher. These aspects have or can have a significant environmental impact (Note: Yes/no calculated automatically)
Provincial Operational Controls: Operational controls maintained provincially and implemented as applicable in Business Areas. Where an aspect is determined to be significant, operational controls should be included in this column to ensure that preventive measures are in place (Note: Provincial controls only. Do not modify)
Local Operational Controls: operational controls maintained at the Business Area level. Where a significant aspect has controls in place that are specific to a business area, they should be listed to ensure preventive measures are adequate to local conditions (Note: Entered by Business Area)

Significant Aspect (Y/N)	Functional Area	Environmental Aspect	Potential Environmental Impacts	Impacts Rationalization (assessment of each impact as it relates to the environmental aspect)	Generally Applicable Example	Probability	Consequence	Inherent Risk	Significant Aspect (Y/N)	Provincial Operational Controls	Local Operational Controls
No	ALL	Fuel Handling (refueling, servicing, storage, transport)	Adverse effect to: Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)	Adjacent tenures: Fuel handling generally occurs within the harvest area or permitted area, therefore there is not considered to be a direct impact to adjacent tenures/private land Air quality: N/A Biodiversity: Impacts may result from large scale events or when directly exposed to SAR, sensitive or critical habitat Cultural heritage resources: N/A Fish & fish habitat (including SAR): Hydrocarbon spills into water can adversely impact fish stream habitat, riparian areas and fish populations Marine sensitive zones: Hydrocarbon spills adjacent to marine areas can adversely impact fish and terrestrial wildlife values, marine biota and other habitat features Natural surface drainage patterns and non-fish streams: N/A Resource features: May adversely impact resource features such as lakeshore management zones Riparian areas: Adverse impacts to riparian vegetation and ecosystem productivity Social values (visual, recreation, noise etc): Spills may result in indirect adverse effects on social values as a result of other impacts Soils: Loss of soil productivity, removal of contaminated soils Terrestrial vegetation / ecosystems: Loss of terrestrial vegetation, ecosystem functionality and productivity Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a direct result of spills Water quality in a CW & domestic water intakes: Adverse affects to water quality, human health and safety concerns Wildlife (including SAR & wildlife habitat features): Damage to ecosystems, habitat features, toxic effects on SAR and other wildlife	Reportable spill into domestic water source, freshwater or marine, critical habitat or SAR	Moderate	Low	L	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Woker and Supervisors field books, Oil Recycling and Landfill Guide

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Yes	ALL	Fire hazard management (Equipment operation, vehicles, fuelling, etc.)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Significant potential impacts to adjacent tenures, including: Timber value, protected areas, SAR, fisheries, wildlife etc. Air quality: Large scale adverse impacts to air quality over the short term Biodiversity: Adverse impacts to biodiversity at a landscape level Cultural heritage resources: May be permanently altered or destroyed Fish & fish habitat (including SAR): Large scale potential impacts to riparian vegetation, water quality, etc Marine sensitive zones: Impacts to intertidal and upland ecosystems Natural surface drainage patterns and non-fish streams: Drainage patterns permanently altered Resource features: May have a material adverse effect on visual quality / scenic areas Riparian areas: Loss of riparian timber and vegetation Social values (visual, recreation, noise etc): Impacts to recreation features, viewpoints, etc. Soils: Loss of soil productivity, Erosion due to increased runoff, absence of vegetation Terrestrial vegetation / ecosystems: Long term alteration of vegetation and ecosystems from fire or fire suppression activities Timber Supply (Includes wildfire hazard): Significant adverse impacts to timber supply Water quality in a CW & domestic water intakes: Adverse affects to water quality, damage to infrastructure Wildlife (including SAR & wildlife habitat features): Destruction of wildlife, habitat features, SAR etc from fire or fire suppression activities</p>	Uncontrolled wildfire / Interface fire	Moderate	High	H	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	BA Guide "Working with Clients Fire Preparedness" Worker and Supervisor Field book
Yes	HARVESTING ROADS & SILVICULTURE	Construction/rehabilitation of trails within harvest areas (Backspar and hoe forwarding, etc.)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Trail construction is limited to within the harvest area or permitted area, therefore there is not considered to be a direct impact to adjacent tenures/private land Air quality: N/A Biodiversity: May have a localized impact on stand level features Cultural heritage resources: Localized damage to cultural heritage features may occur where not identified pre-harvest Fish & fish habitat (including SAR): Potential sedimentation into fish habitat. Impacts to fish habitat from trails are generally mitigated during planning processes Marine sensitive zones: Impacts to marine ecosystems from trails are generally mitigated during planning processes Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions where operational plans are insufficient / not adhered to Resource features: Localized potential impacts to Karst or other resource features Riparian areas: Potential small scale impact to understory vegetation and timber where operational plans not adhered to Social values (visual, recreation, noise etc): No direct adverse impact to social values Soils: May result in localized erosion, soil loss, compaction and loss of productivity. These effects can be mitigated by effective planning and remediation programs Terrestrial vegetation / ecosystems: Localized, temporary adverse effects to terrestrial vegetation, ecosystem functionality and productivity Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a direct result of trail construction Water quality in a CW & domestic water intakes: Localized sediment delivery, potential spills. Impacts to domestic water generally mitigated during planning processes Wildlife (including SAR & wildlife habitat features): Small scale potential damage to ecosystems, habitat features, SAR and other wildlife</p>	Inadequate operational planning / practices leading to localized impacts to resource values (Soils, riparian areas, fish, wildlife, ecosystems)	Moderate	Moderate	M	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	BA Guide "Minimizing Soil Disturbance" and local Deactivation Guide

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No	HARVESTING & ROADS	Hand Falling & Bucking (Note: mechanical falling is considered a ground based operation)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Trespasses could result in a direct material adverse effect on adjacent tenures</p> <p>Biodiversity: May have a localized impact on stand level features</p> <p>Cultural heritage resources: Cultural heritage features could be altered or destroyed by harvesting activities if features are not clearly indicated in operational plans / assessments, or if felled timber causes damage to adjacent features</p> <p>Fish & fish habitat (including SAR): Potential introduction of sediment and woody debris to fish habitat.</p> <p>Marine sensitive zones: Potential damage to upland ecosystems as a result of timber removal. Increased windthrow hazard potential in high wind areas.</p> <p>Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions where operational plans are insufficient / not adhered to (i.e. woody debris introduction to streams)</p> <p>Resource features: Small scale and or temporary impacts to resource features (i.e. introduction of debris to Karst features)</p> <p>Riparian areas: Trespasses in riparian areas can have localized, short to medium term adverse effects on riparian ecosystems, and affect retention requirements</p> <p>Social values (visual, recreation, noise etc): Falling trespasses can adversely affect recreation areas, viewsapes</p> <p>Soils: Any erosion or landslide event that could occur may be attributed to the planning function if an assessment during site planning was not conducted or not conducted adequately, rather than the falling function; compaction is not considered possible because no heavy machinery is used</p> <p>Terrestrial vegetation / ecosystems: Localized, temporary adverse effects to terrestrial vegetation, ecosystem functionality and productivity. Trespasses could impact protected ecosystems</p> <p>Timber Supply (Includes wildfire hazard): Potential localized impact on timber supply should timber become isolated or wasted as a result of inadequate operational planning</p> <p>Water quality in a CW & domestic water intakes: Possible slope failures if operational plans inadequate or not adhered to, localized sediment delivery, potential small spills. Impacts to domestic water generally mitigated during planning processes</p> <p>Wildlife (including SAR & wildlife habitat features): Small scale potential damage to ecosystems, habitat features, SAR and other wildlife (nesting areas and other habitat features potentially destroyed)</p>	Trespass that impacts a sensitive resource or protected area (i.e.. CMT, goshawk nest)	Very Low	Moderate	L	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Local Ribbon and Mapping Standards, SAR guide & information cards
No	HARVESTING & ROADS	Loading & Hauling	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Loading and hauling activities are limited to within the harvest area or permitted area and forest roads, therefore there is not considered to be a direct impact to adjacent tenures/private land</p> <p>Air quality: Dust on active haul roads, small to moderate scale of impact depending on amount of traffic</p> <p>Biodiversity: May have a localized impact on stand level features</p> <p>Cultural heritage resources: No impacts to cultural heritage features are anticipated as a result of loading and hauling activities. These features are more likely to be impacted by earlier aspects of harvesting</p> <p>Fish & fish habitat (including SAR): Potential sedimentation into fish habitat from disturbed soils, roadside ditches etc. Localized impacts. Compaction and other forms of habitat degradation adjacent to areas of significant vehicle activity</p> <p>Marine sensitive zones: Marine facilities are covered under the <i>Marine Log Handling Facilities</i> aspect, and are not considered as part of this aspect. Hauling can result in sedimentation to foreshore areas where drainage structures are not functioning properly</p> <p>Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions where operational plans are insufficient / not adhered to</p> <p>Resource Features: No impacts to resource features are anticipated as a direct result of loading and hauling</p> <p>Riparian areas: Loading and hauling may contribute sedimentation to riparian areas from frequent vehicle activity</p> <p>Social values (visual, recreation, noise etc): Loading and hauling may cause issues relating to frequent vehicle traffic, noise, and lights (if operating at night)</p> <p>Soils: May result in localized erosion, soil loss, compaction and loss of productivity adjacent to roads.</p> <p>Terrestrial vegetation / ecosystems: Localized, temporary adverse effects to terrestrial vegetation, ecosystem functionality and productivity</p> <p>Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a direct result of loading or hauling</p> <p>Water quality in a CW & domestic water intakes: Localized sediment delivery, potential spills.</p> <p>Wildlife (including SAR & wildlife habitat features): Small scale potential damage to ecosystems, habitat features, SAR and other wildlife, noise disturbance</p>	Vehicle incident in or adjacent to sensitive habitat features or waterways (spills, introduction of foreign materials, debris)	Moderate	Low	L	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plan (eRP) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms).	Water Disruption ERP, SAR guide/cards, Wet Weather Shutdown guide

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	HARVESTING & ROADS	Marine Log Handling Facilities (skidways, booming, heli-drop areas & float camps)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Foreshore activities are typically the jurisdiction of Fisheries and Oceans Canada or Ministry of Environment, therefore there is not considered to be a direct impact to adjacent tenures/private land</p> <p>Air quality: N/A</p> <p>Biodiversity: Ongoing material adverse impacts to biodiversity within and adjacent to the footprint of foreshore activities. Environmental protection measures may be required</p> <p>Cultural heritage resources: Cultural heritage features are unlikely to be impacted during operation of existing facilities</p> <p>Fish & fish habitat (including SAR): Ongoing impacts to fish and other marine habitat within and adjacent to the footprint of foreshore activities. Environmental protection measures may be required</p> <p>Marine sensitive zones: Ongoing material adverse impacts to marine sensitive areas where activities improperly located</p> <p>Natural surface drainage patterns and non-fish streams: Surface hardening will result in ongoing drainage management concerns</p> <p>Resource features: Potential ongoing impacts to adjacent features</p> <p>Riparian areas: Ongoing material adverse impacts to riparian vegetation, soils, and marine biota within and directly adjacent to operations</p> <p>Social values (visual, recreation, noise etc): Adverse impacts to viewscape, noise, recreation activity areas (kayaking etc) during operations</p> <p>Soils: May result in ongoing localized erosion, soil loss, compaction and loss of productivity within the within the footprint of activities</p> <p>Terrestrial vegetation / ecosystems: localized, ongoing adverse effects to terrestrial vegetation, ecosystem functionality and productivity</p> <p>Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a result of foreshore activities</p> <p>Water quality in a CW & domestic water intakes: Localized sediment delivery, impacts to domestic water sources unlikely for marine operations, given proximity to salt water</p> <p>Wildlife (including SAR & wildlife habitat features): Ongoing localized damage / disturbance to ecosystems, wildlife, habitat features, potential impacts to SAR where not identified and managed</p>	Ongoing marine habitat disturbance / habitat degradation	N/A	N/A			Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	N/A
Yes	HARVESTING, ROADS & SILVICULTURE	Ground Based Operations (mechanical falling, skidding, hoechucking, piling, stumping, waste recovery & dispersal and mechanical site preparation)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Harvesting is limited to within the harvest area or permitted area, but may adversely affect adjacent tenures where boundaries are improperly located, or not clearly delineated</p> <p>Air quality: N/A</p> <p>Biodiversity: Short to medium term disruptions to biodiversity as a result of harvesting activities</p> <p>Cultural heritage resources: Cultural heritage features could be altered or destroyed by harvesting activities if features are not clearly indicated in operational plans / assessments, or if felled timber causes damage to adjacent features</p> <p>Fish & fish habitat (including SAR): Potential adverse effects including: sedimentation, debris introduction, increased bed load movement</p> <p>Marine sensitive zones: Potential adverse effects including: sedimentation, debris introduction, increased deposition</p> <p>Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions where operational plans are insufficient / not adhered to</p> <p>Resource features: Localized impacts to resource features such as Karst / trails etc</p> <p>Riparian areas: Localized, adverse impacts to riparian vegetation can occur where operational plans are insufficient or not adhered to</p> <p>Social values (visual, recreation, noise etc): Harvesting may result in impacts to viewscape, as well as noise pollution where occurring adjacent to populated areas</p> <p>Soils: Temporary, localized erosion, soil loss, compaction and loss of productivity</p> <p>Terrestrial vegetation / ecosystems: Localized, temporary adverse effects to terrestrial vegetation, ecosystem functionality and productivity</p> <p>Timber Supply (Includes wildfire hazard): Harvesting impacts timber supply, but sustainability of harvest is managed as part of the planning process</p> <p>Water quality in a CW & domestic water intakes: Localized sediment delivery, potential spills and debris introduction</p> <p>Wildlife (including SAR & wildlife habitat features): Stand level (within the harvest area) damage to ecosystems, habitat features, SAR and other wildlife may occur where features are not identified</p>	Site level disturbance to sensitive ecosystems, CMTs or SAR	Moderate	Moderate	M	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Local Ribbon and Mapping Standards, SAR guide & cards, Water Disruption ERP, wet weather shut down criteria, Soil disturbance guide

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No	HARVESTING	Cable Yarding	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Harvesting is limited to within the harvest area or permitted area, but may adversely affect adjacent tenures where boundaries are improperly located, or not clearly delineated</p> <p>Air quality: N/A</p> <p>Biodiversity: Short to medium term disruptions to biodiversity as a result of yarding activities</p> <p>Cultural heritage resources: Cultural heritage features could be altered or destroyed by harvesting activities if features are not clearly indicated in operational plans / assessments, or if yarded timber causes damage to adjacent features</p> <p>Fish & fish habitat (including SAR): Potential adverse effects including: sedimentation, debris introduction, increased bed load movement</p> <p>Marine sensitive zones: Potential adverse effects including: sedimentation, debris introduction, increased deposition into marine areas</p> <p>Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions where operational plans are insufficient / not adhered to</p> <p>Resource features: Localized impacts to Karst / trails etc</p> <p>Riparian areas: Localized, adverse impacts to riparian vegetation can occur where operational plans are insufficient or not adhered to</p> <p>Social values (visual, recreation, noise etc): Harvesting may result in impacts to viewscape, as well as noise pollution where occurring adjacent to populated areas/ recreation features</p> <p>Soils: Temporary, localized erosion, soil loss, compaction and loss of productivity</p> <p>Terrestrial vegetation / ecosystems: Localized, temporary adverse effects to terrestrial vegetation, ecosystem functionality and productivity</p> <p>Timber Supply (Includes wildfire hazard): Harvesting impacts timber supply, but sustainability of harvest is managed as part of the planning process</p> <p>Water quality in a CW & domestic water intakes: Localized sediment delivery, and debris introduction</p> <p>Wildlife (including SAR & wildlife habitat features): Stand level (within the harvest area) damage to ecosystems, habitat features, SAR and other wildlife may occur where features are not identified</p>	Site level disturbance contributing to larger scale event (soil destabilization resulting in landslide)	Very Low	Low	VL	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Soil Disturbance guide
No	HARVESTING	Processing (chipping, grinding, delimiting)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Processing activities are limited to within the harvest area, permitted area, forest roads and log sorts, therefore there is not considered to be a direct impact to adjacent tenures/private land</p> <p>Air quality: Localized temporary impacts to air quality from dust and chips</p> <p>Biodiversity: Where woody debris is accumulating or being removed, there may be localized impacts to biodiversity</p> <p>Cultural heritage resources: N/A</p> <p>Fish & fish habitat (including SAR): Where improperly located, processing may result in debris introduction to fish habitat</p> <p>Marine sensitive zones: Potential localized debris introduction to marine areas</p> <p>Natural surface drainage patterns and non-fish streams: N/A</p> <p>Resource features: Potential debris introduction to Karst / sensitive habitats etc</p> <p>Riparian areas: Potential localized debris accumulation or coarse woody debris removal from riparian areas</p> <p>Social values (visual, recreation, noise etc): Noise pollution where occurring adjacent to populated areas/ recreation features</p> <p>Soils: Temporary loss of productivity in places of debris accumulation</p> <p>Terrestrial vegetation / ecosystems: Localized, temporary adverse effects to terrestrial vegetation in places of debris accumulation</p> <p>Timber Supply (Includes wildfire hazard): N/A</p> <p>Water quality in a CW & domestic water intakes: Localized debris accumulations in and adjacent to water courses where operational plans not adhered to</p> <p>Wildlife (including SAR & wildlife habitat features): N/A</p>	Site level disturbance to soil, habitat or resource features/productivity loss due to debris accumulations	Very Low	Low	VL	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	no local information

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	HARVESTING	Dryland Sorts (upland processing areas)	Adverse effect to: Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)	Adjacent tenures: Log sorting facilities are typically located within the licence area, therefore there is not considered to be a direct impact to adjacent tenures/private land Air quality: Localized, small scale impacts to air quality from dust, exhaust etc Biodiversity: Ongoing material adverse impacts to biodiversity within and adjacent to the footprint Log dump facilities Cultural heritage resources: Ongoing, localized, adverse impacts to features if not identified and managed Fish & fish habitat (including SAR): Frequent adverse impacts to fish and other fish habitat within and adjacent to the footprint of facilities, where improperly located Marine sensitive zones: N/A Natural surface drainage patterns and non-fish streams: May result in ongoing localized drainage pattern disruptions/alterations within and adjacent to the footprint of facilities Resource features: Ongoing impacts to adjacent features (debris accumulation and introduction) Riparian areas: Ongoing material adverse impacts to riparian vegetation and soils within and directly adjacent to operations Social values (visual, recreation, noise etc): Adverse impacts to viewscape, noise, recreation activity areas (depending on location) Soils: May result in ongoing localized erosion, soil loss, compaction and loss of productivity within the within the footprint of facilities Terrestrial vegetation / ecosystems: localized, ongoing adverse effects to terrestrial vegetation, ecosystem functionality and productivity within the footprint of activities Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a result of facilities Water quality in a CW & domestic water intakes: Localized sediment delivery, runoff containing contaminants may be introduced to domestic water sources Wildlife (including SAR & wildlife habitat features): Ongoing localized damage / disturbance to ecosystems, wildlife, habitat features, potential impacts to SAR where not identified and managed	Ongoing soil disturbance / habitat degradation within and adjacent to site	N/A	N/A			Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	N/A
Yes	HARVESTING	Prescribed Burning (pile burning, broadcast burning, windrow burning)	Adverse effect to: Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)	Adjacent tenures: No impacts to adjacent tenures where controlled. Fire escapes may result in adverse effects (see Fire Hazard Management) Air quality: Moderate scale, short term impacts to air quality Biodiversity: Medium term, adverse impacts to biodiversity ranging from stand to landscape level Cultural heritage resources: May be permanently altered or destroyed Fish & fish habitat (including SAR): Potential impacts to riparian vegetation, water quality, etc Marine sensitive zones: N/A Natural surface drainage patterns and non-fish streams: Lesser drainage patterns within prescription areas altered Resource features: localized impacts to resource features within prescription areas Riparian areas: Potential loss of riparian timber and vegetation Social values (visual, recreation, noise etc): Impacts to recreation features, viewpoints, etc. Temporary impacts to usage Soils: Loss of soil productivity, erosion due to increased runoff, absence of vegetation Terrestrial vegetation / ecosystems: Moderate scale medium to long term alteration of vegetation and ecosystems from fire or fire suppression activities Timber Supply (Includes wildfire hazard): Adverse impacts to timber supply in some cases Water quality in a CW & domestic water intakes: Alteration of drainage/soil properties may lead to impacts to water quality Wildlife (including SAR & wildlife habitat features): Destruction of wildlife, habitat features, SAR etc from fire or fire suppression activities	Burn escape that impacts more than 20 ha or affects a resource feature	Moderate	High	H	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Woker and Supervisors field books, Burn Plans, Go No Go Form

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ENVIRONMENTAL MANAGEMENT SYSTEM**

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	ROADS	Log Dump Construction	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Log dump facilities are typically located within the licence area, therefore there is not considered to be a direct impact to adjacent tenures/private land Air quality: Localized, small scale impacts to air quality from dust, exhaust etc Biodiversity: Material adverse impacts to biodiversity within and adjacent to the footprint log dump facilities Cultural heritage resources: Direct, localized, adverse impacts to features if not identified and managed Fish & fish habitat (including SAR): Material adverse impacts to fish and other marine habitat within and adjacent to the footprint of facilities, where improperly located Marine sensitive zones: Localized material adverse impacts to marine sensitive areas where located adjacent to sensitive foreshore areas Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions/alterations within the footprint of facilities Resource features: Potential permanent alteration of resource features where operational plans insufficient / not adhered to Riparian areas: Material adverse impacts to riparian vegetation where they are within or directly adjacent to operations Social values (visual, recreation, noise etc): Adverse impacts to viewscape, noise, recreation activity areas (depending on location) Soils: May result in localized erosion, soil loss, compaction and loss of productivity/ contamination within the footprint of facilities Terrestrial vegetation / ecosystems: Localized, long term adverse effects to terrestrial vegetation, ecosystem functionality and productivity within the footprint of facilities Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a result of facility construction Water quality in a CW & domestic water intakes: Localized sediment delivery, runoff containing contaminants may be introduced to domestic water sources if improperly located Wildlife (including SAR & wildlife habitat features): Localized damage to ecosystems, wildlife, habitat features, potential impacts to SAR where not identified and managed</p>	Long term or permanent alteration of landscape, terrestrial vegetation and ecosystem function within footprint of construction	N/A	N/A			Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	N/A
Yes	ROADS	Road Construction (pioneering, sub-grade construction, ballasting, ditching)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Right of way removal and road construction may have a small scale impact on adjacent tenures where they pass through them Air quality: N/A Biodiversity: Small scale, temporary to permanent stand level alterations to biodiversity Cultural heritage resources: Features may be permanently altered or destroyed where not identified and managed Fish & fish habitat (including SAR): Localized temporary disruptions to fish habitat, sedimentation disturbance. Potential obstructions to fish passage Marine sensitive zones: Sedimentation, contaminants may be introduced to marine sensitive areas where roads are located within or adjacent to these areas Natural surface drainage patterns and non-fish streams: Localized drainage pattern disruptions during construction. These may be temporary or permanent depending on road use Resource features: Potential permanent alteration of resource features where operational plans insufficient / not adhered to Riparian areas: Small scale impacts to riparian vegetation and timber within ROW for life of the road Social values (visual, recreation, noise etc): Adverse impacts to recreation features within or adjacent to new road (trails, camping areas etc.) from increased noise, traffic, use limitations Soils: May result in localized erosion, soil loss, compaction and loss of productivity. These effects can be mitigated by effective planning and remediation programs Terrestrial vegetation / ecosystems: Localized, long term or permanent alterations to terrestrial vegetation, ecosystem functionality and productivity within road footprint Timber Supply (Includes wildfire hazard): Road construction can adversely affect timber supply where poorly located, isolating timber Water quality in a CW & domestic water intakes: Localized sediment delivery, potential spills. Ongoing sedimentation from disturbance Wildlife (including SAR & wildlife habitat features): Small scale potential damage to ecosystems, habitat features, SAR and other wildlife within ROW</p>	Stand level impacts to important features (habitat features, SAR, CMTs or fish habitat)	Moderate	Moderate	M	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Water Disruption ERP, SAR guide/cards, Wet Weather Shutdown guide, Worker \$ Supervisor field books

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Significant Aspect (Y/N)	Functional Area	Environmental Aspect	Potential Environmental Impacts	Impacts Rationalization (assessment of each impact as it relates to the environmental aspect)	Generally Applicable Example	Probability	Consequence	Inherent Risk	Significant Aspect (Y/N)	Provincial Operational Controls	Local Operational Controls
Yes	ROADS	Structure Installation, Repairs & Maintenance (culverts, bridges, woodbox culvert)	<p>Adverse effect to:</p> <ul style="list-style-type: none"> Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features) 	<p>Adjacent tenures: Structure installation may influence adjacent tenures where occurring on roads under permit to a different licensee for access purposes or where adjacent to tenure boundaries.</p> <p>Air quality: N/A</p> <p>Biodiversity: N/A. Replacement of an existing structure at a previously disturbed site is unlikely to significantly impact biodiversity</p> <p>Cultural heritage resources: Cultural heritage features are unlikely to be impacted as a result of structure replacement</p> <p>Fish & fish habitat (including SAR): Potential short tem, localized impacts (sedimentation, disruption or obstructions to fish habitat), where operational plans/processes inadequate</p> <p>Marine sensitive zones: Potential short tem, localized impacts (sedimentation, disruption or obstructions to fish habitat), where occurring in or adjacent to marine areas</p> <p>Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions where operational plans are insufficient / not adhered to</p> <p>Resource features: New structure installation may result in localized impacts to resource features</p> <p>Riparian areas: Temporary, localized adverse impacts to riparian vegetation</p> <p>Social values (visual, recreation, noise etc): Short term disruptions to usage or access where adjacent to recreation areas etc</p> <p>Soils: May result in short term localized erosion from disturbance caused by operations, loss of productivity within road footprint</p> <p>Terrestrial vegetation / ecosystems: localized, temporary adverse effects to terrestrial vegetation, ecosystem functionality and productivity within footprint of structures</p> <p>Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a direct result of crossing structure installation and maintenance</p> <p>Water quality in a CW & domestic water intakes: Potential localized sediment delivery, potential spills. introduction of contaminants from footings (concrete)</p> <p>Wildlife (including SAR & wildlife habitat features): Small scale potential damage to ecosystems, habitat features, SAR and other wildlife within crossing structure footprint</p>	Improper installation or maintenance of drainage structures impacting fish habitat due to encroachment or sedimentation	Low	Moderate	M	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Water Disruption ERP, SAR guide/cards, Wet Weather Shutdown guide, Worker \$ Supervisor field books
Yes	ROADS	Road Maintenance (brushing, ditching, grading)	<p>Adverse effect to:</p> <ul style="list-style-type: none"> Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features) 	<p>Adjacent tenures: Road maintenance may influence adjacent tenures where occurring on roads under permit to a different licensee for access purposes or where adjacent to tenure boundaries.</p> <p>Air quality: Localized temporary impacts to air quality from dust, debris, etc</p> <p>Biodiversity: Previously disturbed areas. No significant impacts to biodiversity anticipated</p> <p>Cultural heritage resources: Cultural Heritage features are unlikely to be impacted by road maintenance where they have been previously identified in the vicinity of roads</p> <p>Fish & fish habitat (including SAR): Potential sedimentation into fish habitat, spills or accidental removal of riparian vegetation</p> <p>Marine sensitive zones: Potential sedimentation, spills or accidental removal of riparian vegetation where activities are conducted adjacent to marine areas</p> <p>Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions where debris or sediment impacts drainage structure functionality</p> <p>Resource features: May result in localized impacts or debris introduction to adjacent resource features such as Karst</p> <p>Riparian areas: Potential localized, short term adverse impacts to riparian vegetation may occur, introduction of debris or sediment</p> <p>Social values (visual, recreation, noise etc): No significant direct adverse impact to social values</p> <p>Soils: May result in localized erosion from removal of vegetation or disturbance on and adjacent to roads</p> <p>Terrestrial vegetation / ecosystems: localized, temporary adverse effects to terrestrial vegetation within ROW</p> <p>Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a direct result of road maintenance</p> <p>Water quality in a CW & domestic water intakes: Localized sediment delivery, potential spills. introduction of debris</p> <p>Wildlife (including SAR & wildlife habitat features): Localized, temporary adverse effects to habitat features, SAR and other wildlife within ROW where not identified and managed</p>	Unauthorized removal of riparian vegetation from fish bearing watercourse or localized damage to habitat or resource features	Low	Moderate	M	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Water Disruption ERP, SAR guide/cards, Wet Weather Shutdown guide, Worker \$ Supervisor field books

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Significant Aspect (Y/N)	Functional Area	Environmental Aspect	Potential Environmental Impacts	Impacts Rationalization (assessment of each impact as it relates to the environmental aspect)	Generally Applicable Example	Probability	Consequence	Inherent Risk	Significant Aspect (Y/N)	Provincial Operational Controls	Local Operational Controls
No	ROADS	Road Deactivation & Rehabilitation	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Road deactivation may influence adjacent tenures where occurring on roads under permit to a different licensee for access purposes or where road use is shared. Air quality: N/A Biodiversity: Deactivation and rehabilitation of disturbed areas is not anticipated to result in a net loss to biodiversity Cultural heritage resources: Cultural heritage features are unlikely to be impacted during remediation of disturbed areas Fish & fish habitat (including SAR): Potential localized, short term sedimentation into fish habitat. Potential small scale impacts where crossing structures have become habitat features Marine sensitive zones: Potential impacts to marine areas from adjacent works or upslope disturbances (sedimentation, debris introduction or soil destabilization) Natural surface drainage patterns and non-fish streams: Road deactivation typically restores original drainage patterns Resource features: May result in localized impacts or debris introduction to adjacent resource features such as Karst Riparian areas: Potential short term localized disruptions to riparian vegetation, soils etc, adjacent to works Social values (visual, recreation, noise etc): Potential loss of access to recreation features or areas Soils: May result in temporary, localized erosion in the within the footprint of rehabilitation Terrestrial vegetation / ecosystems: Rehabilitation of existing roads typically promotes restoration of terrestrial vegetation Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a direct road deactivation Water quality in a CW & domestic water intakes: Localized sediment delivery, potential spills. introduction of debris Wildlife (including SAR & wildlife habitat features): Low impact activity. Short term potential noise disturbance. Habitat features unlikely to be associated with roads</p>	Short term sedimentation or debris introduction to fish bearing waterways	Very Low	Moderate	L	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Water Disruption ERP, SAR guide/cards, Wet Weather Shutdown guide, Worker \$ Supervisor field books (Deactivation guide)
Yes	SILVICULTURE	Silviculture Surveys	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Silviculture surveys are limited to within the harvest area or permitted area, but findings may influence timing of harvesting for adjacent tenures where harvest areas abut tenure boundaries Air quality: N/A Biodiversity: Minimal disturbance, potential introduction of invasive species Cultural heritage resources: N/A Fish & fish habitat (including SAR): N/A Marine sensitive zones: N/A Natural surface drainage patterns and non-fish streams: N/A Resource features: N/A Riparian areas: N/A Social values: N/A Soils: N/A Terrestrial vegetation / ecosystems: N/A Timber Supply (Includes wildfire hazard): Data may adversely influence long term planning where inaccurate Water quality in a CW & domestic water intakes: N/A Wildlife (including SAR & wildlife habitat features): No significant impacts to habitat features anticipated</p>	Missed free growing or regen designation	Moderate	Moderate	M	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	See Jo Ellen for examples i.e KBI processes

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No	SILVICULTURE	Planting & Tree Protection	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: No significant impacts to adjacent tenures anticipated from planting activities Air quality: N/A Biodiversity: Potential stand level alterations to biodiversity where inappropriate species planted on sites Cultural heritage resources: N/A Fish & fish habitat (including SAR): N/A Marine sensitive zones: N/A Natural surface drainage patterns and non-fish streams: N/A Resource features: N/A Riparian areas: N/A Social values (visual, recreation, noise etc): N/A Soils: N/A Terrestrial vegetation / ecosystems: Potential introduction of invasive species from seedlings/personnel Timber Supply (Includes wildfire hazard): Delayed regeneration from improperly planted seedlings, poor survival or forage protection not removed in a timely manner Water quality in a CW & domestic water intakes: N/A Wildlife (including SAR & wildlife habitat features): Localized alteration of feeding habits of ungulates where forage protection required/applied</p>	Inappropriate species planted on site	low	Low	L	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	no local information
No	SILVICULTURE	Mechanical Brushing, Pruning, Spacing, Windfirming Treatments (aerial pruning, topping)	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Silviculture treatments are limited to within the harvest area or permitted area, therefore there is not considered to be a direct impact to adjacent tenures/private land Air quality: N/A Biodiversity: No significant impacts to biodiversity anticipated Cultural heritage resources: Silviculture treatments occurring in previously disturbed areas are unlikely to cause significant damage to cultural features Fish & fish habitat (including SAR): Potential temporary, localized introduction of sediment and debris into fish habitat Marine sensitive zones: Potential temporary, localized introduction of sediment and debris into marine areas where activities occur adjacent or upslope of these areas Natural surface drainage patterns and non-fish streams: May result in localized drainage pattern disruptions debris accumulations significant Resource features: May result in localized impacts or debris introduction to adjacent resource features such as Karst Riparian areas: Adverse impacts to riparian vegetation where operational plans inadequate or not adhered to Social values (visual, recreation, noise etc): Temporary noise disturbance, access limitations during activities Soils: May result in short term, localized erosion and soil disturbance in the vicinity of activities Terrestrial vegetation / ecosystems: localized, temporary adverse effects to terrestrial vegetation where debris accumulations occur Timber Supply (Includes wildfire hazard): No significant impacts to timber supply anticipated as a direct result of silviculture treatments Water quality in a CW & domestic water intakes: Short term, localized introduction of sediment and woody debris Wildlife (including SAR & wildlife habitat features): Temporary noise disturbance. Localized damage to ecosystems, wildlife, habitat features, potential impacts to SAR where not identified and managed</p>	Stand level impact to habitat or resource features	Very Low	Low	VL	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Water Disruption ERP, SAR guide/cards, Wet Weather Shutdown guide, Worker \$ Supervisor field books (Deactivation guide)

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	SILVICULTURE	Chemical Brushing	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Invasive species may spread to adjacent tenures, if not controlled. Water borne contaminants may impact adjacent fisheries values Air quality: Temporary, potentially mobile adverse impacts to air quality Biodiversity: Stand level impacts to vegetation, insects etc Cultural heritage resources: Cultural heritage values may be altered or destroyed if processes for identification and management are not adequate and/or adhered to. Fish & fish habitat (including SAR): Potential introduction of deleterious substances, destruction of fish Marine sensitive zones: Potential introduction of deleterious substances, destruction of fish Natural surface drainage patterns and non-fish streams: N/A Resource features: May result in localized impacts to sensitive habitats Riparian areas: Potential adverse impacts to riparian vegetation and soils, if applied in these areas Social values (visual, recreation, noise etc): No direct adverse impact to social values Soils: Loss of vegetation may contribute to erosion. Contamination of soils may occur in cases of overapplication or spills Terrestrial vegetation / ecosystems: Localized, temporary adverse effects to terrestrial vegetation in the vicinity of application Timber Supply (Includes wildfire hazard): No significant adverse impacts to timber supply anticipated as a direct result of chemical brushing (intended as a tool to promote stand regeneration) Water quality in a CW & domestic water intakes: Potential contamination from application or spills. Typically these are not approved for use in community watersheds Wildlife (including SAR & wildlife habitat features): Localized potential damage to ecosystems, habitat features, SAR and other wildlife, depending on nature and type of pesticide applied</p>	Introduction of contaminants to sensitive habitat, waterways etc	N/A	N/A			Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	N/A
	SILVICULTURE	Aerial Fertilization	<p>Adverse effect to:</p> <p>Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features)</p>	<p>Adjacent tenures: Fertilization is intended to promote growth within previously harvested areas of a tenure, therefore there is not considered to be a direct impact on adjacent tenures/private land Air quality: N/A Biodiversity: Promotion of favourable species within the treatment area may impact species composition Cultural heritage resources: N/A Fish & fish habitat (including SAR): Potential Eutrophication of lakes from increased nutrient loading Marine sensitive zones: Potential nutrient loading in marine environments from fertilizer accumulations Natural surface drainage patterns and non-fish streams: N/A Resource features: No significant impacts to resource features is anticipated as a result of fertilization Riparian areas: Where fertilizers are applied in riparian areas, the risk of nutrient regime changes in waterways increases Social values (visual, recreation, noise etc): No direct adverse impact to social values Soils: May result localized nutrient regime changes where overapplied, spilled Terrestrial vegetation / ecosystems: Potential localized species composition changes Timber Supply (Includes wildfire hazard): No significant adverse impacts to timber supply anticipated as a result of fertilization (intended as a tool to promote stand regeneration) Water quality in a CW & domestic water intakes: Use of fertilizers may result in nitrogen or chlorophyll levels in streams exceeding acceptable limits Wildlife (including SAR & wildlife habitat features): N/A</p>	Introduction of nutrient accumulations to watercourses due to excessive wind / rain	N/A	N/A			Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	no local information

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No	PLANNING	Forest Stewardship Plans (writing results, strategies and measures)	<p>Adverse effect to:</p> <ul style="list-style-type: none"> Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features) 	<p>Adjacent tenures: Where FSP objectives are not met, there may be a material adverse effect to other tenures. WHA or OGMA designations adjacent to tenure lines may also have an adverse effect on adjacent tenures</p> <p>Air quality: FSP Objectives may in some cases only address legislative requirements</p> <p>Biodiversity: Considers variable retention, adjacent retained areas, maximum cutblock size; landscape-level definition used as consistent with legislation; potential loss of biodiversity if strategies are inadequate</p> <p>Cultural heritage resources: Cultural heritage features may be altered or destroyed if strategies do not provide adequate processes for identification and management</p> <p>Fish & fish habitat (including SAR): Sets objectives to meet legal requirements for fish habitat protection, may result in impacts where there is no legislated allowance levels</p> <p>Marine sensitive zones: Sets objectives to meet legal requirements for fish habitat protection, including marine areas, may result in impacts where there is no legislated allowance levels</p> <p>Natural surface drainage patterns and non-fish streams: Defines targets for disturbance levels during operations, may result in cumulative disruptions</p> <p>Resource features: Prescribes management strategies for special resource features, may result in adverse impacts where strategies inadequate</p> <p>Riparian areas: Sets objectives to meet regulatory requirements, site specific factors such as terrain stability and windthrow may result in adverse effects if not identified</p> <p>Social values (visual, recreation, noise etc): Sets objectives to meet regulatory requirements, may cause adverse impacts when considering more intrinsic values (noise, access etc)</p> <p>Soils: Sets objectives to meet regulatory requirements, damage, loss or degradation of soils may occur where strategies inadequate</p> <p>Terrestrial vegetation / ecosystems: Sets objectives for biodiversity, wildlife tree retention and patch size, may result in adverse impacts to sensitive areas or ecosystems where strategies insufficient.</p> <p>Timber Supply (Includes wildfire hazard): FSPs may be exempt from setting objectives for timber</p> <p>Water quality in a CW & domestic water intakes: Sets objectives to meet regulatory requirements, strategies may be insufficient to protect water quality</p> <p>Wildlife (including SAR & wildlife habitat features): Sets objectives to meet regulatory requirements, may result in landscape level impacts to ecosystems where improperly managed or overlooked.</p>	Results and strategies for managing species at risk insufficient, resulting in damage to habitat features or sensitive ecosystems	Very Low	Moderate	L	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Numerous Practice Documents
No	PLANNING	Operational Plans (landscape-level planning of road and cutblock pattern)	<p>Adverse effect to:</p> <ul style="list-style-type: none"> Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features) 	<p>Adjacent tenures: Determines requirements for harvesting adjacent to tenure boundaries; establishes practices to recognize and mitigate impacts to adjacent tenures / private land</p> <p>Air quality: May not be addressed for all activities at the landscape level,</p> <p>Biodiversity: Considers variable retention, adjacent retained areas, maximum cutblock size; landscape-level definition used as consistent with legislation; potential loss of biodiversity if strategies are inadequate</p> <p>Cultural heritage resources: Cultural heritage features may be altered or destroyed if management plans do not provide adequate processes for identification and management</p> <p>Fish & fish habitat (including SAR): Establishes practices to meet legal requirements for fish habitat protection, may not address issues where there is no legislated allowance levels</p> <p>Marine sensitive zones: Establishes practices for operations around sensitive areas, defines characteristics of sensitive areas</p> <p>Natural surface drainage patterns and non-fish streams: Defines operating standards for disturbance levels during operations, may result in excessive disruptions where disturbance too great</p> <p>Riparian areas: Establishes practices to meet regulatory requirements, site specific factors such as terrain stability, windthrow, retention in RMZ's etc</p> <p>Social values (visual, recreation, noise etc): Sets practice requirements for work around recreation features, may not address more intrinsic values (noise, access etc)</p> <p>Soils: Sets objectives to meet regulatory requirements, establishes practices to maintain soil productivity</p> <p>Terrestrial vegetation / ecosystems: Outlines requirements for locating wildlife tree retention and retention adjacent to sensitive features</p> <p>Timber Supply (Includes wildfire hazard): Defines timber management strategies in relation to markets, operability and timing of harvest for areas</p> <p>Water quality in a CW & domestic water intakes: Defines practice requirements for operations around water intakes, community watersheds etc.</p> <p>Wildlife (including SAR & wildlife habitat features): Establishes practice requirements for operations around sensitive habitat, SAR wildlife etc</p>	Inadequate protection for habitat features, wildlife areas or SAR due to lack of information, planning or inadequate practices	Very Low	Moderate	L	No	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Numerous Practice Documents

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ENVIRONMENTAL MANAGEMENT SYSTEM**

Significant Aspect (Y/N)	Functional Area	Environmental Aspect	Potential Environmental Impacts	Impacts Rationalization (assessment of each impact as it relates to the environmental aspect)	Generally Applicable Example	Probability	Consequence	Inherent Risk	Significant Aspect (Y/N)	Provincial Operational Controls	Local Operational Controls
Yes	PLANNING	Cutblock and Road Location, Design and Site Plans (stand-level planning, assessments, prescribing treatments, layout, harvest planning and mapping)	<p>Adverse effect to:</p> <ul style="list-style-type: none"> Adjacent tenures Air quality Biodiversity Cultural heritage resources Fish & fish habitat (including SAR) Marine sensitive zones Natural surface drainage patterns and non-fish streams Resource features Riparian areas Social values (visual, recreation, noise etc) Soils Terrestrial vegetation / ecosystems Timber Supply (Includes wildfire hazard) Water quality in a CW & domestic water intakes Wildlife (including SAR & wildlife habitat features) 	<p>Adjacent tenures: Determines requirements for harvesting adjacent to tenure boundaries; establishes practices to recognize and mitigate impacts to adjacent tenures / private land</p> <p>Air quality: May not be addressed for all activities at the landscape level</p> <p>Biodiversity: Considers variable retention, adjacent retained areas, maximum cutblock size; landscape-level definition used as consistent with legislation; potential loss of biodiversity if strategies are inadequate</p> <p>Cultural heritage resources: Cultural heritage features may be altered or destroyed if management plans do not provide adequate processes for identification and management</p> <p>Fish & fish habitat (including SAR): Establishes practices to meet legal requirements for fish habitat protection, may not address issues where there is no legislated allowance levels</p> <p>Marine sensitive zones: Establishes practices for operations around sensitive areas, defines characteristics of sensitive areas</p> <p>Natural surface drainage patterns and non-fish streams: Defines operating standards for disturbance levels during operations, may result in excessive disruptions where disturbance too great</p> <p>Riparian areas: Establishes practices to meet regulatory requirements, site specific factors such as terrain stability, windthrow, retention in RMZ's etc</p> <p>Social values (visual, recreation, noise etc): Sets practice requirements for work around recreation features, may not address more intrinsic values (noise, access etc)</p> <p>Soils: Sets objectives to meet regulatory requirements, establishes practices to maintain soil productivity</p> <p>Terrestrial vegetation / ecosystems: Outlines requirements for locating wildlife tree retention and retention adjacent to sensitive features</p> <p>Timber Supply (Includes wildfire hazard): Defines timber management strategies in relation to markets, operability and timing of harvest for areas</p> <p>Water quality in a CW & domestic water intakes: Defines practice requirements for operations around water intakes, community watersheds etc.</p> <p>Wildlife (including SAR & wildlife habitat features): Establishes practice requirements for operations around sensitive habitat, SAR wildlife etc</p>	Localized, long term or permanent alteration of drainage, Wildlife or fish habitat, SAR, CMT's or riparian areas where not identified or managed adequately to circumstances	Low	Moderate	M	Yes	Environmental Operating Procedures (EOPs), Environmental Field Procedures (EFPs), Environmental Emergency Response Plans (eRPs) and BCTS Checklist Reports & Forms (e.g. Risk Rating, Incident Report, Test/Drill Report Forms)	Numerous Practice Documents